



15TH Anniversary YEAR

THE BLURB

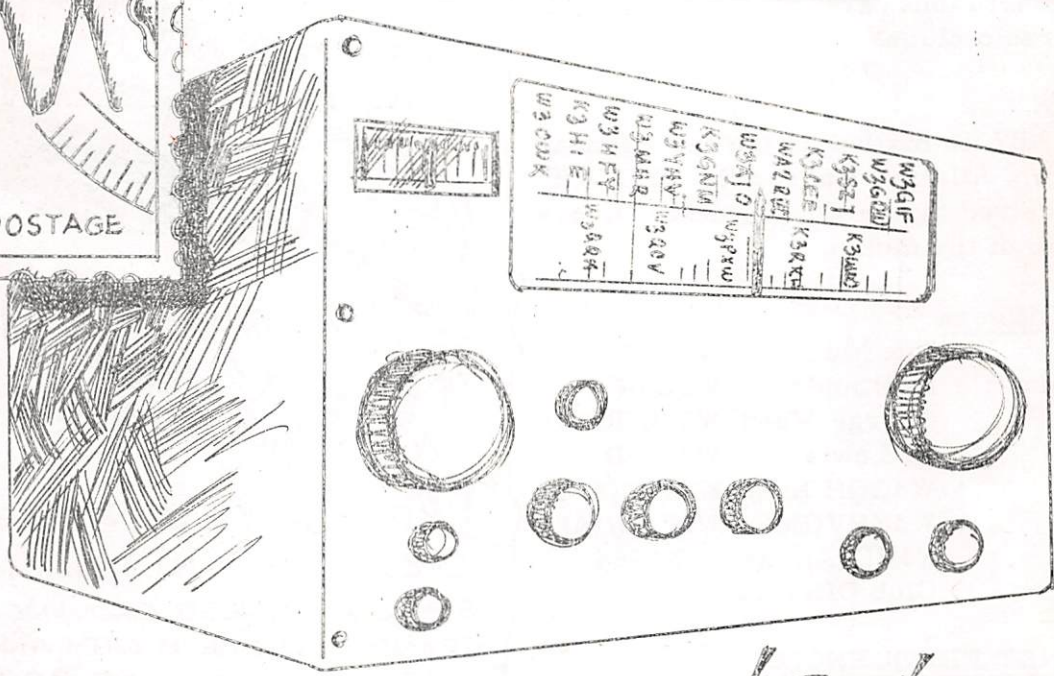
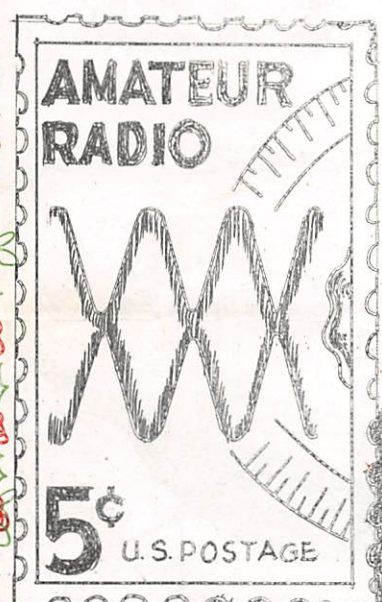
AREA MEMBER

PHILMONT MOBILE RADIO CLUB INC.



(AVAILABLE DEC. 15TH 64)

TUNE in,



YOUR CHOICE for '65... VOTE!

VOLUME 14

NUMBER 12

EDITOR

R. G. Schmilewske, K3KUD
528 Melody Lane
Glenside, Pa. Telephone TU4-0190

STAFF

Publisher W3LEM
Art Work 3QO167
Technical Editor K3GNM
Technical Drawing WA2RDC

CIRCULATION AND PRINTING

Printers W3YHV, K3HIE
Boss Stitcher W3VVS
Collator W3QQH
Typish K3AUW

The "BLURB" is published by and for the members of Phil-Mont to further the interest of Amateur Radio in general and Mobile Radio in particular. We endeavor to keep the news accurate, interesting and in a small way educational. Copying and quoting is permitted and subscriptions are gladly exchanged with other radio clubs.

DEADLINES

The "BLURB" is mailed on the last Monday of the month. All material for the "BLURB" must be received by the Editor, K3KUD, before the 15th of the month.

1964 Club Officers

President: Ed Moore W3ERV
Vice President: Al Hamilton W3GIF
Treasurer: George Weed W3MHR
Secretary: Al Lewis W3WPD
Directors: W3QQH(E64), K3DJE(E65)
W3YHV(E66), W3GOW(A)
K3HIJ(A), and all 1964
Club Officers

NET AND NET FREQUENCIES

Channel 1 - 29.493 mc Channel 3 - 147.78 mc
Channel 2 - 29.629 mc Channel 4 - 50.7 mc
Orange Juice Net Weekdays 0700 - 0730
Scrambled Egg Net 0730 - 0830
Ten-on-Ten Sundays 1000 - 1100
Blarney sessions anytime All Channels
29.493 kc 0930 - 2400
Monitored daily for the benefit of mobiles in the Philadelphia area.

PMRC CALENDAR

MEETINGS

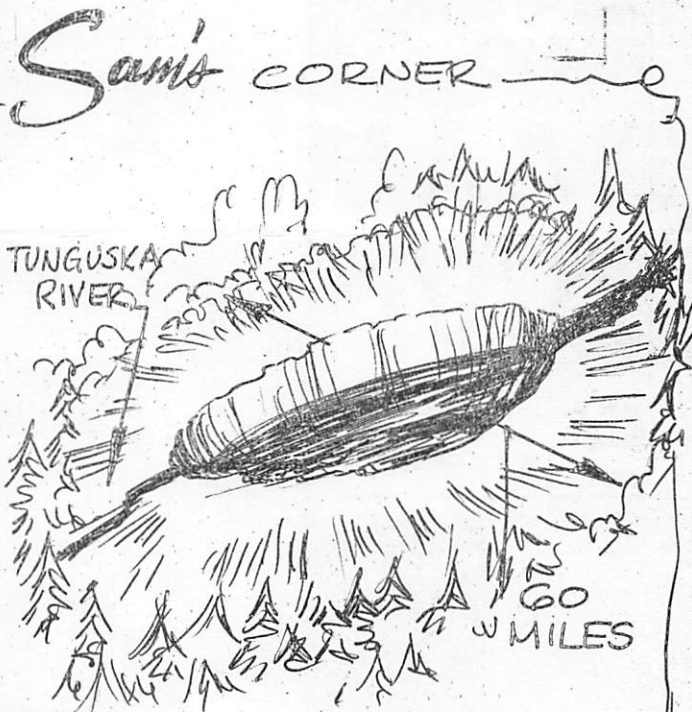
Regular Meetings: First Monday of
each month

Time: 2000 hours (8:00 p.m.)

Place: THE FRANKLIN INSTITUTE
20 & Benjamin Franklin Parkway

MID-MONTH SCHEDULE

April 15, W3WNC	Aug. 19, W3GOW
(Stag Dinner)	Sept. 16, K3CEE
May 13, W3MHR	Oct. 14, W3GOW
June 17, W3VVS	Nov. 18, W3CDY
July 15, W3NIP	Dec. 16, W3WNC



DID A SPACE SHIP CRASH IN
SIBERIA? IN NORTH CENTRAL
SIBERIA A LARGE GLOWING OBJECT
CRASHED TO EARTH WITH AN IMPACT
FELT IN A RADIUS OF 800 MILES!
AN AREA OF 60 MILES IN DIA.
WAS TOTALLY DEVASTATED!
ITS EFFECT IS STILL PLAINLY
SEEN TODAY, EVEN THO THE
DATE OF IMPACT IS.....
JUNE 30 1908

PREZ SEZ

In '64 Phil-Mont sponsored quite a few innovations. We added monitoring stations on 52.525 mc, the national FM frequency. We became DX and local sideband mobile through Gumbaudies new personal rigs and our own club mobile station, W3RQZ. We added a new communications van, installed 3 new daytime operators at W3TKQ, increased the already professional appearance and contents of the BLURB, and one of the nicest, increased the participation on 29.493 of female girls of the opposite sex. Have you gained through these additions? Would you like to see more innovations? More fun in Phil-Mont? Fellows, these things don't just happen, YOU make them happen by cooperating with your club's elected officers. -- Start the '65 ball rolling on December 7! Excellent candidates are available for '65. Their desire to work out your ideas and theirs for next year demand your attention and support. Be certain to vote on December 7. -- Attend the election meeting in person. -- Hear the candidates and their programs. Impossible to attend? use your absentee ballot. Phil-Mont elections are alive. No cut and dried affairs here. If you are able to hold a pencil you can and should participate in this extremely important Phil-Mont project. As "swan song" by the "lame duck" president, and this ain't "for the birds," either, I want to thank you all for your cooperation during these months. This is a terrific club! Phil-Mont, where such a large percentage of the members take such an active part succeeds only in direct proportion to its ability to serve and satisfy its members. Let's continue to keep Phil-Mont successful in '65.

de W3EQV

* * * * *

IT SEEMS TO ME

With the close of another year just around the corner, I would like to say a few words of thanks to:

Ed Moore, W3EQV -- for never failing to get the "Prez Sez" to me on time, even though he was traveling all over the country.

Al Bubeck, K3GNM --for coming up with a Teknigram every month and

Dave Anderson, WA2RDC--for making sure that he did! -- as well as doing the sketches and schematics to illustrate them.

Bill Bubeck, W3YHV- for making the printing job look good every month--despite my terrible typing.

Jim Spencer, W3QQH--for "fielding" the complaints about BLURB deliveries so well; and doing just about anything else I asked.

Sam Kunceovich, 3Q0167- for once again doing an excellent job on the BLURB art work.

Peg, my XYL, for suggesting, proof-reading, and forgiving the hours spent in getting the BLURB together each month.

To every one else who helped us to get twelve more issues into print, and to the membership in general, for the Philmonter Award.

de K3KUD

Monday, December 7 8:00 PM - Regular meeting at the Franklin Institute.
Wednesday, December 16 8:00 PM - Mid-month meeting -location to be announced.
Friday, December 25 - Christmas - have a very merry one!
Monday, December 28 8:00 PM - BLURB folding, W3LEM

* * * * *

NEWS AND ACTIVITIES

The regular meeting for December will, of course, be taken up by the election of officers for the coming year. Plan to attend and cast your vote for the candidate of your choice. We guarantee a lot of fun, excitement and good fellowship. Visitors are invited to attend and enjoy the evening with us.

If you cannot attend for any reason, cast your vote by mail. Clip the ballot which appeared in the November BLURB and mail it to the Judge of Elections. YOUR VOTE CAN MAKE A DIFFERENCE!

* * * * *

The following is the text of a telegram received by Jim Spencer, W3QQH, on the day of the banquet:

"Congratulations on your 15th Birthday. Very sorry that work prevents our being in the banquet. Lots of luck to the best organization in the world.

Dick K3KDP/4 and Nancy WA3AAZ/4"

* * * * *

An examination session for General and Extra Class Amateur Licenses will be held at West Catholic High School on Friday, December 18, 1964. Anyone interested in taking either of those examinations is invited.

* * * * *

Note for future reference that this year the 1965 Electronic Parts Show will be held in New York. The show will be held between March 31 and April 4, at the New York Hilton and Americana Hotels. Instead of the customary 3-day run, the show will be extended to 5 days, opening with two days of forums. The exhibit halls will then open on a Friday and remain open through Sunday.

In addition to the new Parts Show, the IEEE Convention will also be held in New York again this year. The dates are March 22-25. There should be plenty to see and learn from these two fine affairs.

* * * * *

Don't forget to mail off the \$3.00 fee to Harrisburg for license plate renewal. Forms have been mailed and should have been received by each of you by now. The form and fee must be sent to the Department of Revenue and a receipt will be returned. This receipt must then be enclosed with the fee and application for regular license plates in order to have the call letter plates sent out.

* * * * *

The Editor and staff of the BLURB wish to take the opportunity to wish all our readers a most happy and joyous holiday season and a prosperous New Year.

NEWS AND ACTIVITIES (continued)

The regular meeting of the club was held on Monday, November 2, at the Franklin Institute, with 45 persons present including 5 visitors.

This being the annual nominating meeting, Chuck Snyder, W3NIP, introduced the men selected by the nominating committee, and after a brief review of the rules for the election of officers, accepted several additional nominations from the floor. (A list of all nominees appears elsewhere in this issue).

The second part of the program consisted of some heartfelt "plugs" for 75 meter mobile SSB by Chuck Snyder, W3NIP, who discussed the TR-3; Charlie Greenwood, W3GOW, discussing the NCX-3; and Dick Behrens, W3DMK, who provided information on the Galaxy III.

A surprise entry was provided by Brad Martin, W3QV, making his first appearance in several years, who displayed a transmitter/receiver, circa 1910. Brad built this unit during the last month as a follow-up on the Teknigram he provided for the October BLURB. The workmanship was beautiful to see and for some of us, it was the first spark-gap transmitter we had ever gotten a chance to examine.

Jim Spencer, W3QQH, gave us a pictorial report on the communications trailer, using colored slides and describing the installations. This presentation is being set-up to provide a sequel to "Every Single Minute" and will be available to any club interested in it.

Among our visitors was Sam Kuncovich, our BLURB artist, who was making his first visit with us. At the suggestion of Ed Moore, W3ECV, those present gave Sam a rising vote of thanks for his efforts on behalf of Phil-Mont.

A financial report was presented by the Banquet Committee and reprinted for the information of the membership:

Income:

146 tickets @ \$7.50 each	\$1095.00
---------------------------	-----------

Expenses:

143 dinners plus cake cutting fee	\$734.00
Music	135.00
Ticket printing	13.65
Men's prizes	50.00
Women's prizes	100.00
Stationery	13.45
Anniversary cake	30.00
Center-piece material	4.00
Rebates (K3NYN & wife; W3QCV) @ \$4.25	12.75
	<u>\$1093.15</u>
Balance	\$ 1.85

The above statement is correct to November 2, 1964 and any changes will be of a minor nature. The success of the banquet and the financial condition reflected indicates how well the committee did its work.

* * * * *

Russ Miller, K3NYN, advises that Channel 12 (TV) is presenting an educational program called "Electronics at Work" every Wednesday and Friday at 7:00 PM. This course will consist of 90 one-half hour lessons, and is presented in a very straightforward manner. Printed study material is available for \$7.50 for the entire course.

* * * * *

The Phil-Mont Supper Club will meet at Arthur's Steak House, Walnut and Sydenham Sts, on Monday, December 7, at 6:00 PM. This get together precedes the regular meeting and everyone is welcome and invited.

NEWS AND ACTIVITIES (continued)

Election of Officers:

Please note the following actions taken by the membership at the regular meeting, November 2, 1964:

- 1) All absentee ballots must be in the hands of the Judge of Election, John Tinaglia, W3AWH, not later than 2400, December 6 (Sunday). Ballots received after that date may be excluded.
- 2) An absentee voter may, if desired, list candidates in the order of preference, thus making his vote valid for ballots subsequent to the first in the event that his first choice candidate for any office should be dropped-out by the prescribed voting procedure.

The following is a complete list of candidates for each office:

<u>President</u>	<u>Secretary</u>	<u>Treasurer</u>	<u>Director</u>
W3GIF	K3CEE	W3GOW	W3AJ0
W3HFX	K3HIE	K3SZJ	K3GNM
K3HIJ	WA2RDC	K3UWO	W3OWK
W3MHR			K3OEJ
W3YHV			W3UMK

Absentee ballots were published in the November BLURB.

* * * * *

Amateur station K3UN, operating at Gimbel's Cheltenham during the week October 17-23, 1964 in celebration of United Nations Week, logged the following contacts in the course of a very successful operation:

712 total contacts
506 six-meter contacts
46 stations outside Continental
United States were contacted.
33 different prefixes
21 different countries

The participating clubs were Phil-Mont, North Penn, Delmont, Delco, Mt. Airy, West Philadelphia, Mobile Sixers, Main Line VHF and The Defense Clothing & Textile Supply Agency ARC.

Six meter equipment was loaned by "Ham" Beuerger and was a Clegg Zeus/Interceptor. Twenty and seventy-five meter gear was an NCX-3/NCL-2000 loaned by the National Company and the antenna was a cubical quad loaned by Delmont RC. Reports indicate that all equipment functioned perfectly.

A saddening note was added to the project by the death of John Harris, W3AYG, who was Chairman of the Delaware Valley Council of Amateur Radio Clubs. John had worked very hard in the preparations for this event and his loss will be deeply felt by us all.

* * * * *

Our spies report that Gene Pressler, W3ZXV, Editor of the Brand X Club paper, STATIC, has volunteered to assist in the preparation of the Delaware Valley Council Bulletin. Gene does a fine job on STATIC and will certainly do the same for The Bulletin.

* * * * *

Do you have a technical question and no answer? Send it to the editor and we will try to get the answer. Our Technical Staff is at your service - and if they can't come up with it, we'll publish the question and ask the membership to help.

NEWS AND ACTIVITIES (continued)

Lester W. Burket, M.D., better known on Channel 1 as "Doc", W3HQJ, has been elected to the board of directors of the national American Cancer Society. "Doc", who is Dean of the School of Dental Medicine at the University of Pennsylvania, is also internationally recognized in his field and holds several honorary degrees from foreign universities.

* * * * *

The staff of the BLURB and the entire membership of Phil-Mont extend sincerest sympathy to Lloyd Sherman, W3CDY, on the loss of his wife Jerry, who passed away on November 5 after an extended illness.

* * * * *

Thanks to the Secane Amateur Club bulletin "News and Views" for the nice comments on the Phil-Mont banquet. We are glad that the "Secane-ites" who attended had a good time.

* * * * *

Lots of activity on the 75 meter SSB channel these days. The olde editor was with K3GNM in New London, Connecticut when he kept a schedule with W3YHV, and made contact with W3NIP/mobile, who was in the Philadelphia area. It looks like this stuff is here to stay and 3993 kc may become a very popular spot.

* * * * *

Jim Spencer, W3QQH, was a guest at the North Penn meeting on November 10. Jim gave the talk and slide presentation on the communication trailer. We hope that many more clubs will take advantage of this program.

* * * * *

Ivyridge Amateur Radio Club will sponsor a lecture and demonstration of the optical lazer given by The Bell System, on Monday, January 11, 1965. The location of the demonstration is the basement auditorium of the Grace Lutheran Church, located on the northwest corner of Ridge and Roxborough Avenues, Philadelphia. The time is 8:00 PM. Parking facilities are available on the street, around the Kendrick Recreation Center and refreshments will be served at the conclusion of the demonstration.

* * * * *

A new DX certificate, The BDX Certificate, is announced by the Brazillian DX Club. This certificate is awarded in six classes for foreign hams/swl's as follows: BDX 25 - 50 - 100 - 200 - 500 - 1000, the figure meaning the number of CBDX members contacted/heard since September 1, 1964.

One sticker is given for each class. Send log, QSL's and 10 IRC's for return to:

CBDX - P.O. Box 842
Recife, Pe. Brazil.

Logs should state: claimed class, station call, CBDX number, date/time, band, mode, received report (minimum 3-3-8 or 3-3). It is advisable to use registered mail. Send S.A.S.E or 3 IRC's for list of members or other correspondence.

* * * * *

PHIL-MONT'S 15TH ANNIVERSARY BANQUET

The William Penn Inn in Gwynedd was the scene, on Saturday, October 24, of the annual Phil-Mont banquet.

144 persons attended the affair which this year celebrated the 15th birthday of the club. The festivities included good food, dancing, and the presentation of awards. A list of the awards and the winners appears elsewhere in this issue. A total of 62 door prizes was awarded, 34 to the ladies and 28 to the men. Winner of the men's first prize, a National NCX-3, was Brad Martin, W3QV.

As has always been our custom, speeches and formality were kept to a minimum, but it seems that mention must be made of a talk by Jim Spencer, W3QQH, in which he recounted the story of the birthday cake. It seems that in backing out of Jim's driveway, Al, W3GIF, bumped the steel stake to which Jim's dog is normally secured. Jim's son, in order to prevent the dog's escape, unhooked the dog and put it in the house. Momentarily alone, the dog went exploring and found the Phil-Mont birthday cake reposing in all its glory on the dining room table. The gory details of what followed need not be told, suffice it to say that immediate repairs were required on the cake. (No mention was made of the dog.) All came out alright however, thanks to the cake baker's skill, and after being cut by the two Charter Members present at the banquet (W3QQH and W3PXY) the cake was enjoyed by all present.

Presentation of awards was very ably handled by Paul Bohlander, W3VVS; introduction of the candidates for office for 1965 was in the hands of John Tinaglia, W3AWH, and the duties of Master of Ceremonies fell to our president, Ed Moore, W3EQV.

The Banquet Committee, consisting of W3MHR, W3QQH, W3GIF, K3KUD, and chairman W3GOW, is to be congratulated for doing an excellent job and providing a most enjoyable evening.

The Sweepstakes winner, whose name was drawn at the banquet, was J. Kotzer, a non-ham. The winning ticket was provided by Hy Hecht, W3WNC. Congratulations are in order for the committee who so ably handled this project. The committee consisted of W3DSG, K3CEE, and K3NYN. Thanks also to all the members of the club who worked hard to make both the banquet and the Sweepstakes a success.

* * * * *

PHIL-MONT AWARDS FOR 1964

The following is a review of the awards presented at the banquet, and the recipients:

The Leroy Hauser Memorial Award: Instituted this year in memory of the founder of Phil-Mont, this award was presented to Fred Shaw, W3ADV, in recognition of his efforts in the modernization and improvement of the Franklin Institute station, W3TKQ.

Phil-Monter Of The Year: Presented annually to a member selected by the club membership, in recognition of interest and effort in behalf of Phil-Mont. This year awarded jointly to Bob Cox, K3CEE and Bob Schmilewske, K3KUD.

Lady Phil-Mont Award: Awarded annually to the YL or XYL who has made a special contribution for the good of the club. Presented this year to Edna McVaugh, W3LEM-XYL, in recognition of her patience and good humor in putting up with the monthly BLURB folding sessions and the tracked-up rugs and empty "Coke" bottles we invariably leave behind.

IDUABMUG Awards: Presented when appropriate for the "goof-of-the-year", this year went to Al Hamilton, W3GIF, for the accidental release of a small dog, property of W3QQH, which precipitated an attack on the 15th Anniversary Birthday Cake.

NEW PRODUCTS

Hallicrafters has announced two new VHF transceivers, the SR-42 for the two-meter band, and the SR-46 for the six-meter band. The units incorporate many new design features.

A low pass filter is used in the receiver input of the SR-46 and high pass filters are used in both the receiver input and the transmitter output of the SR-42. These filters, plus the choice of oscillator injection frequencies, make both units virtually immune to TV and FM "birdies". A neutralized muvistor front end and eleven tuned RF and IF circuits greatly improve the spurious rejection and noise figure, as well as boosting sensitivity. High frequency crystals used in the transmitters insure low spurious output.

Up to four crystals may be switch selected from the control panel, and a fifth position allows use of a plug-in external VFO.

SR-42 and SR-46 receivers are dual conversion superhetrodyne type, with quartz crystal control of the second oscillator. The variable oscillator is zener-regulated for better stability, and solid state silicon rectifiers are employed. Receivers are equipped with automatic noise limiters and "S" meters. Push-to-talk circuitry is employed.

The SR-42 and SR-46 provide complete band coverage plus double the usual bandspread, through the use of dual tuning ranges. The cabinet is designed for either base or mobile use, and "snaps off" for easy access. A 12 volt mobile power transformer is built in along with the regular 115 volt AC power supply. The MR-40 mounting kit, available separately, contains the vibrator, D.C. Power Cord and mounting bracket needed for simple conversion to mobile operation.

Amateur net price on each of the above units is \$189.95. Net price on the mounting kit is \$11.50.

* * * * *

The Gernsback Library, Inc. announces the publication of a new book containing in one easy to use volume the most needed formulas and data in electronics. The book is entitled "Electronics Data Handbook", and the cost is \$4.95.

The book contains chapters on Direct Current; Alternating Current; Vacuum Tubes; Transistors; Antennas and Transmission Lines; Measurements; and Tables and Miscellaneous Data.

Copies may be obtained from Gernsback Library, Inc.; 154 West 14th St.; New York, N.Y. 10011.

* * * * *

IT'S A FACT (From Florida Skip)

Japanese electronics imports have cut into the U.S. payrolls to the tune of \$198 millions per year, \$22 million in capital expenditures, and \$206 millions in the use of domestic materials...The answer is simply manufacturing cost - mostly labor.

Just to give an example, EIA says that a TV, black and white, U.S. origin, costs about \$130.00, but imported TV costs only about \$58.00 FOB point of origin, or a little less than half price. Imported tubes at about 36 cents each compare to domestic tubes at 81 cents. The averages go on and on, all in favor of the import. Many U.S. manufacturers are now buying in the East and labeling under their own brand name....It all stems from the high cost of labor.

CHANNEL CHATTER

After "holding-still" for numerous barbed comments about his Corvair, George, W3MHR, was able to silence the critics one night recently when he took GIF, QQH, and KUD on a high speed ride along Waterloo Road in Newtown Square--complete silence reigned after the second 90 degree turn.---That was the same night that Jim, W3QQH, carefully directed George along the route to the home of Charlie, W3GOW, for a Banquet Committee meeting. Upon arriving, it was discovered that the meeting had been planned for the home of Chuck, W3NIP -- a fact which QQH had somehow overlooked, even though he had set the whole thing up! ---The day before the banquet, Bob, K3KUD, was seen washing and drying pumpkins with loving care. How do you explain "pumpkin-pan" hands?---Dick, W3UMK, was out chasing balloons again on Sunday, October 25. A good fast chase resulted in fun for all concerned.---Dave, WA2RDC, had mechanical trouble with his Apache, but like a good Philmonter, borrowed the emergency rig from QQH and stayed on the air. The trouble has now been corrected and the Apache is back with us.--- Al, W3GIF, had car trouble enroute to work one morning recently, but was rescued when he called for help on Channel 1.---Al, incidentally, came very close (for him) to buying a new car, but instead settled for two new bolts in the gearshift linkage.---Ep, K3AWC, is on Channel 1 with a TR-3. It has more punch than his 5 watter!---Harry, W3KDO, booming in from Blue Bell on the Orange Juice Net.---Jack, W3PXW, waiting for an insulator to complete installation of a Mosley TA-33 beam.---Brad, W3QV, assisting the gang at K3UN in all sorts of ways.---Gil, K3LDQ, being heard on the channel from time to time. Welcome back!---Bill, K3HIE, now has a mobile in each of his cars. The new one sure sounds good and Bill can hear lots of signals for a change. Must be nice to have money.---"Mike", K3UJI, (K3HIE-XFL) heard on six meters helping Mel, W3IWO, with his homework.---Thanks to W3UMK for an assist with the above material.

* * * * *

SWAP AND SHOP

For sale: Complete 6 meter station. Homebrew 100 watt xmtr; U.S.Navy communications recvr, all bands incl. 6 meters; Gonset 6 and 2 meter VFO; SWR bridge; 2 microphones; misc. other equipment.
All the above from the estate of Les McCullam, K3RWF.

Contact Mrs. Lobb
LO-6-9473

For sale: DX-100 xmtr. Perfect condition, ready for SSB \$95.00

Contact K3OST
EL-6-2849

For sale: 65 foot tower (2 pieces), requires welding. Good condition. May be picked up in Maple Shade, N.J. \$200.00

Contact K2DEI

* * * * *

SWAP AND SHOP (continued)

For sale: Hallicrafter matching set. SX-140 receiver, Used-reconditioned-like new. HT-40 Transmitter, New-never used-factory wired.
Telrex GM-309, 3 element, 6 meter beam, new-never used.
Entire equipment originally cost \$200, a real buy at \$175.00

Contact William Swain
1421 Suffolk Lane
Phila. 51, Pa.
MI-9-3159 (weekends or after
6:00 PM weekdays)

* * * * *

USEFUL MANUAL FROM "SAMS"

"Transistor Circuit Manual" by Allan Lytel (Catalog #TCM-1). A very excellent and complete book of transistor circuits and information. This book crams into 255 pages, chapters on the basics of transistors; audio amplifiers; RF and IF circuits; timers; flip-flops; power control; switching and logic circuits; and many others. It contains over 200 schematics of transistorized circuits, most of which use PNP and NPN transistors, but also included are circuits and information covering specialized devices such as tunnel diodes, MADT units, zener diodes, Binistors, Trigistors and Dynaquads. Some of the subjects covered in detail are transistor ignition systems, filters, power supplies, oscillators, transistor testers, solar cells and circuits therefor. Cost of the book is \$4.95 and it is recommended for anyone contemplating the use of transistors for any application, professional, amateur or just to experiment.

* * * * *

VIBRATOR ELIMINATOR

A new solid-state vibrator eliminator for mobile equipment using mechanical vibrators, "Vitran", simply plugs into the vibrator socket - no tools are required for installation. Two models are available: VE-194-P (vibrator pin #1 positive) and VE-195-N (vibrator pin #1 negative). Makers of the "ViTran" say that the advantages over conventional vibrators include: drastically reduced noise by elimination of vibrator hash; conservation of power; boosted output and cooler operation. The units feature all transistorized construction. Field and environmental testing, as reported by the maker, show that "Vi-Tran" will operate at temperatures from -50 degrees F to 180 degrees F. Power is maximum as authorized by FCC. It is enclosed in a dust-free aluminum can, blister packed with complete installation data on the card. Manufactured by the I.E.H. Manufacturing Co., Inc., New York.

* * * * *

A MERRY CHRISTMAS AND A HAPPY NEW YEAR TO ALL OUR READERS.

TRANSISTORIZED RTTY CONVERTER

The need for a FSK converter has made its presence known in the new Phil-Mont communications trailer which is equipped with a Teletype Page Printer with no means to make it work with a receiver.

A simple inexpensive converter was published in a recent 73 magazine with the circuit, Fig. 1 and information supplied by W1JJL.

Audio from the receiver is fed through T-1 and is limited to a set value by the 13K resistor and the two 2N34's connected across the secondary. The first 2N269 is self-limiting by virtue of the unbypassed resistor in the emitter circuit. Also note there is a fairly large value bypass condenser connected between the collector and ground of the same transistor. The purpose of this is to reduce high frequency noise and signal leak-through.

The second 2N269 is utilized as an amplifier and provides more than enough gain to drive the 1N34 rectifier. Notice that the collector of this transistor is connected to the center tap of the toroid rather than the outside. This is to reduce the loading effect of the collector impedance on the selectivity of the tuned circuit.

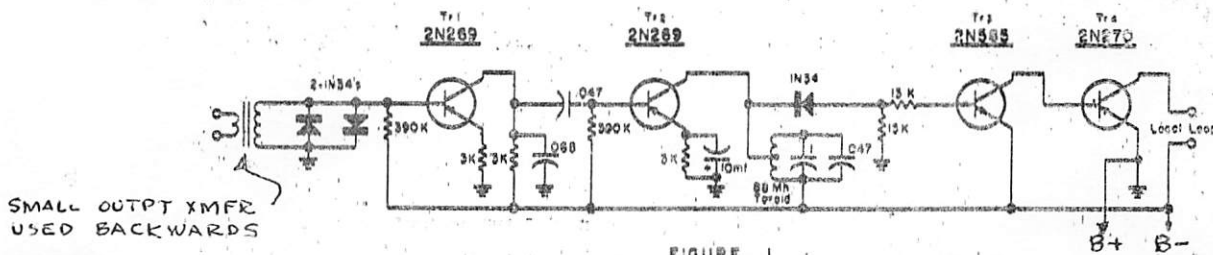


FIGURE 1

13K Resistor across secondary of transformer not shown in schematic.

Transistor TR3 acts as a dc amplifier and builds up the output of the rectifier to a value high enough to key the output transistor. The two 13K resistors in the base circuit of this transistor are the only really critical parts of the unit. It is advised not to change the value as they set the current of the output loop. Also it is easily possible to destroy transistor TR3. If you must experiment with these values, connect a milliammeter in the emitter circuit of TR3 and watch the value of this current closely. Also be sure that the 1N34 rectifier is connected to the junction of the two resistors, not to the upper end, as this also controls the amount of current drawn by this transistor. With a 12 to 15 volt

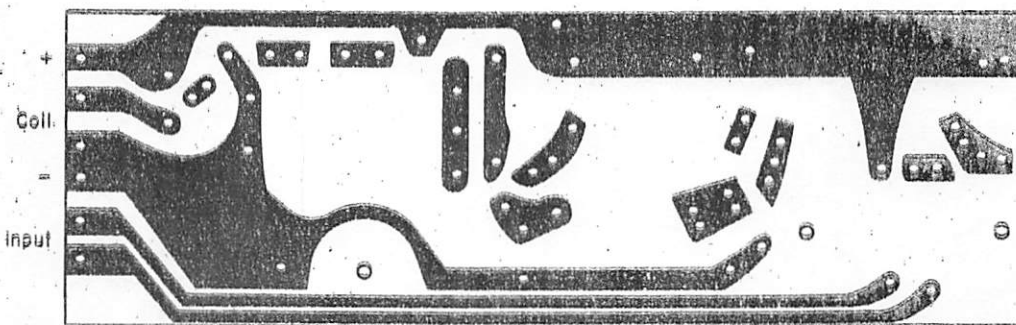


FIGURE 2

supply connected, the loop current will be between 60 and 65 milliamperes and can be used to key the machine magnet directly. The tuned circuit is set to the space frequency and when a signal is received, the current in the local loop drops to almost zero. The printed board that was used FIG.2 measures 3 X 9 inches and a full size layout is available from the BLURB TECH-NI-GRAM Staff.

PHIL-MONT MOBILE RADIO CLUB INC.



The "Blurb"

A PHIL-MONT MOBILE RADIO
CLUB PUBLICATION

10 No. YORK RD. WILLOW GROVE PA.

C. R. Spencer Jr. W3CQH
124 Central Ave,
North Hills, Pa. 19038
R

THIRD CLASS MAIL
RETURN REQUESTED

TIME VALUE